JUN 28-4





Initial Max deformation

The maximum force F = kx occurs when x is a maximum with x = 0.

U= $xT = mgx - xkx^2 = 0$, $x = \frac{xmg}{R}$ So F = kx = xmg

3/130 Let s = distance dawn incline before reversal of director.

 $U_{x}^{-1} = 100(x)(10+1-5) - 300(10+5-5) \frac{1}{10} = 1046 + 66$ $\Delta T = \pm \frac{350}{32.2} \left[v^{2} - (29)^{2} \right] = 4.66v^{2} - 377 + 6.6$ $U_{x}^{-1} \Delta T : 10+6 = 4.66v^{2} - 377$ v = 17.45 + ft/sec

The initial kinetic energy is positive, regardless of the whichly direction.

3/131 30 to 10

150 (\$ 500 60") - 30 12 (1 - 100 10) = \$ \$0.10"-0") U" = 160.8, 10 - 1268 11/100 3/132 UF ST; mg(0.8-12 cm 60)

= \frac{1}{2} = \frac{1}{2}





Second interval $15(2.0)(y) - [50(2.0)0.5 + 127.4] \frac{1}{2} = 0 - \frac{1}{2} 15(2.01)$ $-\frac{1}{2} 50(4.01)$ y = 2.14 m, $5 = \frac{1}{2}(2.2.2.14) = \frac{1.67 \text{ m}}{1.67 \text{ m}}$

3/135
$$U \in \Delta T$$
, $-\int_{0}^{\pi} 3 \times^{2} f \cos x) dx = \frac{1}{2} \frac{dF}{dE} (0 - V^{2}) dx$

$$\chi^{2} + 30 \chi^{2} \Big]^{2} = \frac{585}{3E^{2}} U^{2} , \quad V \text{ in Misso.}$$

$$U^{2} = \frac{37}{288} (69 + 480) - 60.82 (Misso)^{2}, \quad U \cdot 280 Mpm$$

$$\frac{3/136}{3} \Theta - \tan^{-1} \frac{1}{108} - 3.43^{2}$$

$$U_{1-2} = \Delta T + U_{0} + mgh - \frac{1}{2} m(U_{0} \cdot V_{0})$$

$$U_{0} = -\frac{1}{400} (18) (200 \sin 3.43^{2})$$

$$+ \frac{1}{2} [400 \left[\left(\frac{2}{3.4} \right)^{2} - \left(\frac{100}{3.4} \right)^{2} \right]$$

$$= -683 000 \text{ Terms } -683 \text{ kJ}$$

Energy last Q = 683 kT

3/37 The power output of the drivetrain is

Pout = Fu = 540 (\frac{10}{3.4}) = 14 and W

The power input to the drivetrain:

Pin = \frac{14 and and an analysis of the mater and the Telegraph Teleg

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David Baud

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